



Tweeting for teachers:

how can social media support teacher professional development?

Julie McCulloch, Ewan McIntosh and Tom Barrett

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Pearson Centre for Policy and Learning

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Executive summary

Time and time again, research shows that teacher quality is by far the most important factor in driving up standards in schools. Effective ongoing professional development is key to ensuring that teachers perform to the best of their abilities, keep abreast of new developments, and adapt their practice to take account of these.

The UK government, like many others, has taken this message to heart. Underlining its commitment to improving teacher quality in its 2010 white paper, *The Importance of Teaching*, it has introduced a range of measures in this area, including changes to Initial Teacher Training and the introduction of new Teaching Schools. The government also recognises the importance of encouraging and enabling teachers to learn from each other, stating that 'we know that teachers learn best from other professionals and that an 'open classroom' culture is vital: observing teaching and being observed, having the opportunity to plan, prepare, reflect and teach with other teachers.'¹

Many teachers and school leaders would applaud this focus, and are already one step ahead. Using emerging technologies and social media tools, teachers are beginning to take control of their own professional development, finding new ways to learn from each other, to reflect on their own practice, and to develop learning and support networks of like-minded professionals all over the world.

In the current constrained financial climate where, despite the best intentions, CPD budgets are often the first to be cut, this type of low cost, self-directed teacher development is interesting. Might the spread of such informal, peer-based, online CPD help to support the government's drive to raise teaching standards, supplementing the larger scale plans at minimal additional cost? This paper explores this question, seeking to understand:

- How are teachers and other educators currently using social media to aid their professional development, and what do they and their students gain from it?
- What evidence is there for the benefits of peer-to-peer teacher CPD, and for using social media in this way?
- What can teaching learn from industry in this respect?

Drawing on emerging academic research in this area, and on the experience of trailblazing teachers, it recommends a number of ways in which school leaders and policymakers can exploit the benefits of social media for teacher professional development.

¹ Department for Education (2010), *The Importance of Teaching: The Schools White Paper 2010*, p. 19

School leaders should:

1. learn about and engage with the social platforms that their teachers, parents and pupils are using every day;
2. use a social media tool as part of their communications with the school community;
3. validate and support their staff in using social media tools for ongoing professional development;
4. turn online activity into offline actions, in order to harness the benefits of face-to-face interaction alongside those of online interaction;
5. implement robust systems for evaluating the impact of CPD on teacher effectiveness and student outcomes.

National and local policymakers should:

1. publish guidelines and support for teachers and leaders to help them use social media in schools;
2. consider how they will begin to unfilter social media sites for use in schools;
3. recognise and celebrate self-directed professional learning by teachers using online tools, and the role of social media in this learning;
4. create a common online space where the whole education community can find each other;
5. ensure that all Initial Teacher Training courses demonstrate a strong focus on the use of social media tools for ongoing professional development.

While never seeking to devalue the benefits of high-quality, face-to-face professional development and learning, this paper argues that social media have huge potential as a support to the collaborative, teacher-led approach to CPD which the government and many experts endorse.

Introduction

'The quality of an education system cannot exceed the quality of its teachers.'

This line, from McKinsey's hugely influential report *How the world's best-performing school systems come out on top*, has become one of the most quoted phrases in education today. Googling the phrase brings up nearly a million results, with educators and politicians from around the globe and across the political divide taking it as a wake-up call to examine the quality of their own teachers.

The statistics behind the headline are compelling. In their examination of 25 of the world's school systems, McKinsey found that students placed with high-performing teachers progressed three times as fast as those placed with low-performing teachers². The negative impact of low-performing teachers is severe. Primary pupils placed with low-performing teachers for several years in a row suffer 'an educational loss which is largely irreversible'³. According to McKinsey, 'the evidence suggests that even in good systems, students that do not progress quickly during their first years at school, because they are not exposed to teachers of sufficient calibre, stand very little chance of recovering the lost years'.⁴

The stakes are high. The UK government, like many others, has taken this message to heart. It highlighted its commitment to improving teacher quality in its decision to call its 2010 schools white paper *The Importance of Teaching*, and this point was clearly reinforced throughout the paper. Drawing directly on McKinsey's findings, the white paper commented that 'the best education systems in the world draw their teachers from among the top graduates and train them rigorously and effectively, focusing on classroom practice. They then make sure that teachers receive effective professional development throughout their career, with opportunities to observe and work with other teachers, and appropriate training for leadership positions'.⁵

In the year since the publication of the white paper, we have seen this commitment take shape in a stream of policy announcements focused on improving teacher quality. There are proposals to significantly change initial teacher training, with a recent discussion paper⁶ outlining plans to, amongst other things, only fund trainee teachers with a 2:2 or higher and require applicants to take a more rigorous literacy and numeracy test. New Teaching Schools, modelled on existing Teaching Hospitals, will lead and develop approaches to teacher development, and newly designated Specialist Leaders of Education – deputies, bursars and heads of department – will be encouraged to support people in similar positions in other schools.

The detail of some of these policies may be controversial and open to discussion, but the relentless focus on teacher quality is clear. Particularly commendable is the government's recognition of the importance of encouraging and enabling teachers to learn from each other. McKinsey identified this as one of the key ways of improving instruction, commenting that 'in a number of the top systems ... teachers work together, plan their lessons jointly, observe each others' lessons, and help each other improve. These systems create a culture in their schools in which

2. Barber, M. and Mourshed, M. (2007), *How the world's best-performing school systems come out on top*, p.12

3. Barber, M. and Mourshed, M., op cit, p.12

4. Barber, M. and Mourshed, M., op cit., p.12

5. Department for Education (2010), *The Importance of Teaching: The Schools White Paper 2010*, p.9

6. Department for Education (2011), *Training our next generation of outstanding teachers: An improvement strategy for discussion*

collaborative planning, reflection on instruction, and peer coaching are the norm and constant features of school life. This enables teachers to develop continuously.’⁷ *The Importance of Teaching* picks up on this: ‘We do not have a strong enough focus on what is proven to be the most effective practice in teacher education and development. We know that teachers learn best from other professionals and that an ‘open classroom’ culture is vital: observing teaching and being observed, having the opportunity to plan, prepare, reflect and teach with other teachers. Too little teacher training takes place on the job, and too much professional development involves compliance with bureaucratic initiatives rather than working with other teachers to develop effective practice. Only 25 per cent of teachers report that they are regularly observed in classroom practice and two-thirds of all professional development is ‘passive learning’ – sitting and listening to a presentation.’⁸

The government proposes to challenge the status quo by removing the current three hour limit on the amount of time a teacher can be observed, by considering reward mechanisms for teachers who have ‘undertaken a programme of collaborative professional development and met challenging standards’⁹, and by introducing a new scholarship scheme to encourage teachers to strengthen their subject knowledge and skills to masters level and beyond.

These large scale national developments are welcome, and should have a beneficial impact on teacher quality. But what is interesting is the extent to which teachers are already taking control of their own professional development, finding new ways to learn from each other, and using emerging technologies to do so effectively and efficiently. Teachers are using the potential opened up by social media tools such as Twitter, Facebook, blogs and wikis to interact with other teachers, to share ideas, to plan collaboratively and to spread good practice.

In the current constrained financial climate where, despite the best intentions, CPD budgets are often the first to be cut, this type of low cost, self-directed teacher development is interesting. Might the spread of such informal, peer-based, online CPD help to support the government’s drive to raise teaching standards, supplementing the larger scale plans at minimal additional cost? This paper explores this question, seeking to understand:

- How are teachers and other educators currently using social media to aid their professional development, and what do they and their students gain from it?
- What evidence is there for the benefits of peer-to-peer teacher CPD, and for using social media in this way?
- What can teaching learn from industry in this respect?
- What could school leaders and policymakers do to further exploit the potential of social media to help teachers develop in a cost-effective way?

7. Barber, M. and Mourshed, M., op cit, p.28

8. Department for Education (2010), op cit, p.19

9. Department for Education (2010), op cit, p.23

I: How are teachers and other educators currently using social media to aid their professional development, and what do they and their students gain from it?

The Organisation for Economic Co-operation and Development, highly regarded for its PISA assessments and other studies of educational effectiveness, recognises the central place of collaboration in teacher CPD. In a recent report, it described professional development as ‘activities that develop an individual’s skills, knowledge, expertise and other characteristics as a teacher. The definition recognises that development can be provided in many ways, ranging from the formal to the informal. It can be made available through external expertise in the form of courses, workshops or formal qualification programmes, through collaboration between schools or teachers across schools (e.g. observational visits to other schools or teacher networks) or within the schools in which teachers work. In this last case, development can be provided through coaching/mentoring, collaborative planning and teaching, and the sharing of good practices.’¹⁰

Yet, with some notable exceptions, traditional teacher CPD isn’t held in high regard. In a recent survey¹¹ by Teaching Leaders, an organisation focused on developing middle leaders in schools, teachers questioned the quality and value of many training courses. One head of CPD felt that ‘The external providers are ... expensive, and the staff gave them poor feedback. We’d rather have our own staff lead training as they know the school better than anyone’. Another middle leader commented that ‘the only CPD we get is after-school sessions. They aren’t compulsory and the teachers who need them most don’t attend, then there’s no follow-up’. Only 38% of the participants in the Teaching Leaders survey thought that their schools monitored and evaluated the impact of CPD. Where evaluation did take place, it largely focused on output rather than impact – feedback forms recording the usefulness of the event or ranking the facilitator – rather than a more robust approach to measuring long-term change in teaching practice or pupil outcomes.

It seems that a decade of top-down, cascading, initiative-led CPD has left many teachers disenchanted with a model of training that told them what they ought to be learning, sent them on a lacklustre day-long course where, with luck, the highlight was a decent lunch, then packed them off back to the classroom to get on with the day job. An increasing number of teachers are rejecting this model, and instead seeking other ways of developing their knowledge and skills. The teachers questioned in the Teaching Leaders survey, for example, showed a strong desire to work with other teachers in similar schools. 76% of participants not currently working collaboratively with other schools said that they would like to, and all those that currently worked with other schools found it useful.

So where might social media fit into all this? Social media lend themselves particularly well to cross-school collaboration and the sharing of good practice, but they can play a part across all the forms of CPD described above. This section highlights examples of teachers and others involved in education using social media to share their own expertise or tap into the expertise of others, to develop ideas collaboratively, to observe other teachers in action, and to coach and mentor their peers. It also showcases three different collaborative events, which demonstrate the power of social media in bringing people and ideas together.

10. OECD (2009), *Creating Effective Teaching and Learning Environments: First Results from TALIS*, p.49

11. Teaching Leaders (2011), *Developing Leaders, Inspiring Others: The Future of Continuing Professional Development*

1.1 What are social media?

'Social media' can be defined as the technologies and tools that enable people to express their opinions online. David Meerman Scott, a marketing strategist and well-known commentator in this area, describes social media as 'providing the way people share ideas, content, thoughts, and relationships online. Social media differ from so-called "mainstream media" in that anyone can create, comment on, and add to social media content. Social media can take the form of text, audio, video, images, and communities.'¹²

Social media include social networking sites like Facebook, Twitter and LinkedIn, but also blogs, video and photo sharing sites like YouTube, Flickr and Vimeo, chat rooms and message boards where people meet and discuss topics of interest, and wikis (websites that anybody can edit and update).

1.2 Personal case studies

Probably the most well-known social media website for teachers is the TES forums (www.tes.co.uk/forums), a chatroom where 1.5 million members discuss an eclectic range of education-related topics. The following section aims to showcase how some trailblazing teachers are using less widely known social media tools and sites.

Case study 1: Dr Neil Hopkin using Twitter and blogs to draw on experience from around the world

Executive Headteacher, Rosendale and Christchurch Family of Schools, South London

Neil Hopkin is currently an executive headteacher of two primary schools in South London, and has been writing a professional blog and using Twitter for nearly five years. He has helped develop staff awareness and practice in the use of social media tools across a number of schools he has worked in.

Neil's advocacy of social media use revolves around the need to cope better with the deluge of information and ideas that threatens to swamp anyone involved in education. He prefers to seek out ideas on Twitter rather than on blog posts, because of the brevity of tweets. Time constraints mean that he prefers to present his own thoughts using video, or in other visual mediums, rather than as reams of text.

The decision of an executive head, working across two primary schools, to invest time in social media use is a result of Neil's enthusiasm to share. He recognises, though, that the high and low points of any teacher's energy through the school year greatly affect one's ability to get out there and learn from each other. As Neil explains, 'The fluctuations and bio-rhythms of the professional year do affect your ability to commit what you want to into the blog. Sometimes it is emotionally quite difficult to turn to writing longer blog posts and to enthuse in more length. That is why Twitter is much easier: it's quick to share a sentence or two.'

¹² Scott, David Meerman (2010), *The New Rules of Marketing and PR*, 2nd edition, p.38

To understand it, you've got to use it

Some of Neil's motivation to take part in social networks such as Twitter and Facebook has come from his desire to better understand the platforms. Even a basic knowledge and understanding has allowed him to deal more effectively with online issues at school, and he has been able to advise his staff and colleagues with greater confidence and authority than if he had no knowledge of the nuances of the social networks involved: 'The leader's role is absolutely crucial in the use of social media in schools, including making a significant positive contribution to the role it can play. More than anything, it is about establishing a philosophy and an approach to learning and the learning of the adult workforce. The validation by a school leader of social networking for professional development is a crucial and fundamental start to it being a success. You must be able to create an environment where teachers are willing to take chances and be comfortable when things do not turn out well. As a school leader, you do not have to be a master of understanding all of those possibilities, you just have to enable that process to take place.'

Neil worries about the negative effect the media portrayal of social media will have on its role in education: 'The great fear that surrounds the use of social networks in schools, which is probably going to be multiplied by a thousand times due to its role in the recent rioting [in London and other English cities in August 2011], really is going to hamper our ability to teach students and teachers how to use social networking productively and appropriately. It simply will not be good enough to bury our heads in the sand because of fear. If social networks have been demonised, we have to look the demon in the eyes and stare it down.'

He believes that headteachers are responsible for engaging with social media and understanding the issues as well as they can, to help construct an appropriate curriculum which will inspire, excite and make a significant contribution both to standards and to safeguarding.

Taking the best ideas from around the world

One of the biggest impacts Neil believes social media have had on professional learning is that we are so easily able to draw on ideas from around the world. His contacts with other headteachers prior to using social media were limited to those from similar locations, with similar needs and challenges. This can have the effect of confirming presuppositions and prejudices, and means that, when complex situations arise, beyond your experience and those around you, the support available from colleagues may be narrow or limited.

Neil explains that, in the connected world of social media, although you may still have a limited number of people you connect with, they are spread around the world and in very different contexts to yours. These senior leaders are able to share their perspectives and challenge your own thinking – which can only be a good thing.

Blog: <http://neilhopkin.wordpress.com>

Twitter: <http://twitter.com/neilhopkin>

Case study 2: Marc Faulder the personal learning network as a pillar of support

Foundation 2 Teacher, John Davies Primary School, Nottinghamshire

Marc Faulder is an early years classroom teacher who has just completed his Newly Qualified Teacher (NQT) year at a primary school in Nottinghamshire. He has only been using social media tools to support his professional learning for a short time.

Some of Marc's first social media use for learning was during his teacher training. He created a Facebook group to get ideas for classroom displays, and this was the first time he began to see the value of social media within his teaching.

It wasn't until February 2011 that Marc began to engage once again with social media tools, this time Twitter. After attending a teacher-led conference, TeachMeet in the Midlands (see page 17 for more on TeachMeet), Marc was able to remain connected to those who attended and to continue the conversations that had started that day. He immediately saw the value in connecting to fellow professionals: 'It is difficult to find people to discuss day-to-day issues with. But Twitter has had a big impact on my work, as I can connect with other teachers to talk things through. I am the only Reception teacher in my school, but I was able to use Twitter to connect with other Reception and early years professionals.'

Open, research-led sharing

Twitter has provided a useful platform for Marc to continue the open, sharing, research-led approach to education he enjoyed at university. On taking up his first teaching post in 2010, he soon realised that not everyone in every school wants that style of conversation. Twitter and blogging have both provided ready access to that dialogue once again, beyond the walls of school.

In addition to a class blog, Marc began writing his own professional blog, which he quickly realised was ideal as an NQT portfolio. Normally paper folders have to be kept, and little discussion beyond school can occur. By writing up his NQT experiences in a blog post and then sharing this with his Twitter network, he 'broadened this effort so much more, people sharing their opinion and extending my thinking – even just reassuring me.'

Marc describes his understanding of a Personal Learning Network as a 'pillar of support, knowing a few people within my online networks that will respond and help out if I need something.'

Striking a balance

Reflecting on his use of social media for professional development, Marc says: 'It has had a massive impact and is one of the most important parts of my development this year. It is what has moved me forwards. It is equal to what goes on in school. In some ways it has done more.'

However, he does suggest that trainees NQTs think carefully about their work/life balance. Often social media use can eat into your personal time, blurring the lines between work and the rest of your life. Although teachers will happily access Facebook to catch up with friends, continuing conversations about school in these spaces may not always be so desirable.

Marc suggests that headteachers should be using social media tools for professional learning themselves, or at least have someone in school who is able to use it proficiently. He believes it should be embedded within school – not just wheeled out for one-off occasional use on 'ICT days', but part of the day-to-day practice of every teacher, to raise the profile of professional online learning.

Blog: <http://enablingenvironments.posterous.com>

Twitter: http://twitter.com/marc_faulder

Case study 3: Oliver Quinlan

blogging and tweeting to reflect on your own practice

**Lecturer in Education, School of Early Years and Primary Education Studies,
Plymouth University**

In 2011, Oliver Quinlan left the Year 4 class teacher role, in which he spent the first two years of his teaching career, to become a lecturer in education at Plymouth University. He has been using social media throughout the course of his teacher training and career so far.

As a teenager, Oliver used a blogging platform that his friend had created to stay in touch with friends. Consequently, when training to be a teacher, he was comfortable returning to this social media tool to write up his teaching experiences. Reflecting on his placements proved a valuable process in itself. It was an activity designed solely to help shape his own thinking and to share ideas and resources with colleagues on his PGCE course.

The reflective practitioner

Throughout his teaching, Oliver has considered his blog, and the process of reflection needed to write regularly on it, to be a vital aspect of his professional development. Blogging during teacher training clearly demonstrates the concept of the 'reflective practitioner', and has the ability to make concrete what is otherwise seen as an abstract, hard-to-demonstrate phrase. Oliver explains that blogging for an audience helps him to shape his thinking by 'pulling in different ideas and seeing the relevance of them, synthesising them.'

Finding new perspectives

Twitter was the next tool that Oliver began to use. He feels that Twitter is 'less about making connections in your head and more about those connections coming from other people.' While blogging is a more personal process, the value in using Twitter comes from the ongoing reaction and perspective you can quickly gain from your network: 'Social media bring an immediacy and a geographical spread of perspectives, causing you to question the assumptions that you have about what you are teaching. The more extreme the contrasts are, the more you question fundamental things. When you communicate with educators from around the world you gain so many different points of view so quickly.

One of the key practical benefits for having an online network is the convenience and speed with which you can locate potential learning resources. Personal insights add so much more value to the search for good resources: 'People will say 'here is something I used, here is how I used it with my class, the context with which it was used, and this is what I would have done better if I had used it the next time.'

Oliver feels that sharing his experiences online has had a hugely positive impact on the way that he relates to other members of staff at his school. He is more willing to suggest resources, ideas and connections he has found through his professional online networks.

He points out that there are some issues that have not yet been resolved around work/life balance and the role of professional online participation. He believes we can no longer expect our job to come in in a neat little box which we can put away at the end of the day. The use of social media by education professionals for professional networks continues to challenge and blur the work/life boundaries.

In Oliver's opinion, headteachers need not only to accept social media as a professional tool, but also to recognise the power of self-organised learning that educators are engaging when using it. In addition to validating its use within school, time and space should be invested to allow staff members to continue self-initiated professional learning.

Blog: <http://www.oliverquinlan.com/blog>

Twitter: <http://twitter.com/oliverquinlan>

Case study 4: David Gilmour blogging to encourage local connections

Education ICT Team, East Lothian Council, East Lothian, Scotland

As part of the Education ICT team for East Lothian, David Gilmour has been at the heart of developing edubuzz.org, the regional blogging platform provided for schools and classes, which can garner up to half a million visits a day to the online product of students' and teachers' thinking.

Making local connections

The edubuzz story is one of a local authority who used existing free online community tools and blogs to help address a problem: how do teachers across the region connect and learn from each other? The roots of the project were established in 2004 from research questions explored by Don Ledingham, then a headteacher and currently the Executive Director of Education and Children's Services for East Lothian Council, who was looking at how teachers could be better supported in schools. What could they do, with hardly any resources, to improve teaching and learning?

He identified that schools and teachers were frustrated with the way new initiatives were introduced. There was a sense of isolation from teachers across the region, and a need to work together to stop re-inventing the wheel. Social technologies seemed to offer a ready-made solution.

Emerging open source community blogging tools like EZ Publish were introduced, allowing community members to write short pieces which everyone could see and comment on. David and the team began to see the potential and popularity of these blog posts. Teachers were finding out that they were teaching similar topics to others in the region, and wanted to connect. They decided to focus their efforts on encouraging the burgeoning network of teachers in this online space.

Impressed with the support teachers were getting, East Lothian Council invested in a dedicated server to run Wordpress Multi-User (WPMU), a more refined blogging platform, and began to host the content centrally. This commitment, along with upgrading school broadband and networking capabilities has, over the years, helped to establish a strong infrastructure on which the blogging community could flourish.

Today, WPMU is still used, enhanced by free add-ons released over the years. It allows thousands of blogs across the region to be centrally managed. These blogs are created by teachers for their classes or as a whole school looking to share activities taking place. Some parents and senior leaders in the authority also share content through the platform.

A rich learning infrastructure

The regional commitment to blogging as a means to connect schools and teachers has changed attitudes over the years, as David explains: 'You no longer have to go through the arguments about whether this is a good idea or not; it is now self evident.' Whereas many UK schools and local government officers continue to struggle to implement online technologies in schools, East Lothian's commitment and persistence has created a rich learning infrastructure that has been normal practice for many years.

Initially many teachers struggled to understand the audience for their blog posts, but David points out that, as soon as parents began discussing what was being shared, teachers recognised the valuable role blogs had in the community: 'The teachers would ask 'Is anyone reading this?', but it would be when parents came into parents' evenings months later that they saw the feedback loop being closed. It is when they realise there is a real audience for their work that the value of their efforts is reinforced.'

One of the characteristics of edubuzz.org is the development of an informal support arrangement for schools. The fact that the nearly 1400 blogs can be supported from a single, central system allows technical support to be provided easily and effectively: 'Edubuzz is like the nursery slopes. People can get involved in a supervised way, they can get quick support from the support staff directly due to the central system. This is often missing from other public services and online learning platforms.'

David now sees teachers moving on from simply blogging into other areas of social networking, such as Twitter, as a natural extension and development of the project. For many teachers, the class or professional blog is a central point around which lots of other social media participation pivots, and in which a great deal of professional learning takes place.

Challenging traditional communication strategies

Blogging within the edubuzz community, in David's opinion, helped to challenge the traditional communication strategies within schools. The notion of a controlled, top-down message given out by local authorities and schools was being continually challenged and eroded by the posts from teachers within classrooms. Some headteachers found this a challenge, admits David, and opposed the use of the blogs in their school because they were losing control.

It is common to hear of resistance to technology initiatives from senior leadership, usually due to a lack of understanding and knowledge. In East Lothian, it was the continual *positive* feedback from the community that began to tip the balance and persuade senior leaders to engage with blogging in their schools. David explains that many headteachers across the region began to recognise the value of active class blogs in their schools because they gave them access to what was happening. They could tap into the activities going on across the whole school and find out more, or comment on children's work. This proved to be another valuable result of sharing the activity in schools, and the school community was drawn closer together.

Something that sets edubuzz apart from other individual blogging efforts is the way the community activity is celebrated and used to subtly encourage and inspire more blogging. If you visit the edubuzz home page you are presented with an activity stream, showing the latest activity across the whole of the regional network of bloggers. Schools that have set edubuzz.org as their home page can click through and read about what is happening in other schools in the region. The stream of activity acts as a subtle reminder to the community about the activity of others, as well as source of inspiration or potential collaboration between schools: 'The children have learned that if they write a class blog post it will have its five minutes of fame on the activity stream of all of the schools in the region.'

The systematic and local authority led initiative continues to be successful because it keeps the needs of the teacher and school at the heart of its efforts. It was from the teachers' desire to connect and learn from each other that it began, and this approach is still central to the future of edubuzz.org and blogging in the region.

Blog: <http://edubuzz.org/david/>

Twitter: <http://twitter.com/dgilmour>

Case study 1: Dream teachers sharing videos of inspirational teaching

The television series Jamie's Dream School was created to highlight how the UK education system is failing many students. Subsequently, in an effort to find practising teachers who are inspiring students in their classrooms day in and day out, the Britain's Dream Teachers competition was established. A range of difficult curriculum topics for 14-16 year olds was identified, and the challenge was set for teachers to create short videos that helped explain the answers or concepts involved in an engaging way. There were 21 separate topics across seven curriculum subjects, ranging from electromagnetic induction in Physics to Shakespearean language in English.

The competition was hosted entirely on YouTube (www.youtube.com/dreamteachers). To enter, videos needed to be uploaded to the teacher's own account, thereby encouraging them to engage with the social platform. Over 220 videos were submitted during the competition, all of which are publicly accessible and can be used to support work in schools.

The use of social media was the key platform for the competition, but because the submitted content is publicly accessible it also means that the accumulated content will remain as a rich educational resource for teachers. Content on YouTube can be easily shared across other social platforms and embedded in blogs, in turn amplifying the effect of sharing good practice.

David Rogers, a teacher at Priory School Specialist Sports College in Portsmouth, won the Geography category with his video explaining long shore drift. He thinks there is huge potential in the education content on YouTube for teachers: 'There is a huge amount of useful material on there for the Geography classroom. One of the best features is that clips are 'bite-size' and it's relatively easy to find the exact content that is needed for a class. For example, if you need to get across the concept of the industrial revolution and its impact on geography, then you'll probably find just the clip you need'.

In David's opinion, 'most of the overtly 'instructional content' on YouTube tends to be rubbish – pitched at the wrong ability, incorrect, not meeting the National Curriculum or exam board specifications or too long. However, there are other excellent video platforms such as iTunesU and the BBC Bitesize classclips, that are very useful, especially for directing students to for homework activities. With my own department, we have shared knowledge by creating videos together. These must have a really clear purpose. One of the first things we did was to communicate our 'manifesto', our vision for our geography (www.youtube.com/watch?v=8YUzhtZ2Kvs). We sourced Creative Commons music for the clip, took the photographs and storyboarded the whole thing. We now revisit this each year, making sure that we refresh these skills.'

David thinks that there should be more competitions like this, especially since funding is so tight. He believes that the key to creating successful learning content is not simply to copy and paste actual lessons into film – the format is totally different from the classroom, and doesn't translate well. When asked what needs to change to make more of video content and sites such as YouTube in schools, David is unequivocal: 'First, unblock useful sites. Then help teachers to create content for their department or for the whole school. Use pupils to help with technology, but don't just leave them to their own devices. In my experience, while our students are able to use devices, they are not aware of basics, like planning shots and thinking through the story they want to tell. Basic media training for teachers to cover composition, storyboarding and so on would be a great help, and there are free 'how-tos' online for those already interested in this.

'Key, though, is a barrier that individual teachers must overcome – many teachers still don't like to share...'

Case study 2: #ukedchat

fast and furious Twitter-based CPD

#ukedchat is a Twitter-based weekly discussion group of education professionals in the UK. It was formed following the success of the US-based group #edchat.

It can often be difficult to follow the threads of conversations on Twitter, as messages update so quickly, are not threaded in the same way as a web forum might be, and often don't have any obvious conversation structure. The hashtag (#) is therefore often used to label or tag individual tweets. When a word or phrase is preceded by the hashtag (e.g. #ukedchat) the uniqueness of the term makes it easy to find again. All messages tagged in the same way can be searched for on a Twitter app or on search.twitter.com, revealing the ongoing thread of conversation. It's then much easier to have a single thread of messages about a topic.

By adding the hashtag #ukedchat to any Twitter message, a teacher's thoughts are automatically added to the stream of tweets using the same hashtag. The weekly #ukedchat discussion begins with the gathering of topic ideas on a wiki page, a webpage anyone can edit and add their idea to. This list is a growing pool of discussion ideas to draw from. Four topics are then chosen and put to a public vote, which occurs in the week leading up to the Thursday evening discussion. The topic is then discussed by the group during a one hour period. This time limit ensures conversation remains fast, furious and focused, with each contributor reading the constant stream of messages from others, and contributing their viewpoint or classroom examples.

Although the discussion itself lasts only one hour, the legacy of archived discussion is substantial and anyone can access selected highlights from the group blog (ukedchat.wordpress.com). This is updated every week by a volunteer moderator, who contributes and adds to the conversation but also curates the subsequent archive of tweets, ideas and links. Discussions are archived under categories such as 'CPD', 'parents' and 'curriculum', making it easy to access older discussions for ideas and inspiration. There is even a book of compiled discussions from 2010.

#ukedchat is one of the finest examples of how educators have used social media for continued professional development. The discussion groups are free and open to join, and with such a diverse mix of people being involved, inevitably many useful resources, links and connections are made.

Case study 3: TeachMeet

sharing face-to-face events with an online audience

Since its humble beginnings in an Edinburgh pub in 2005, the TeachMeet initiative has grown in popularity across the UK. The initial concept has remained strong – to provide an informal space for teachers to share practical ideas with each other.

TeachMeets are sometimes described as ‘unconferences’, and are characterised by very different structures from those teachers are used to in terms of professional development. Attendance is free, and the teachers signing up are also the speakers. The presentations at TeachMeets are only two or seven minutes long, keeping the pace fast and focused. Ewan McIntosh, one of the instigators of the TeachMeet model, says ‘What we ended up with was a kind of regular event that anyone could put on, where people were sharing stories and trying to share some practice as well, but in a really laid-back, informal environment’.

In recent years, the use of social media to help promote and prolong the impact of TeachMeet events has become much more embedded. Most of the events are publicised and promoted via social media channels such as blogs, Twitter and Facebook. Where social media have perhaps had the biggest impact is in how the content of the face-to-face events has been shared with an online audience. This has been done in a variety of ways, including:

- live video streaming through open source or free platforms such as the Open University’s Flashmeeting;
- participants ‘live blogging’ the talks as they happen;
- tweets and social networking updates organised using a hashtag (e.g. #tmslfl for TeachMeet Scottish Learning Festival 2011)
- photography uploaded online to sites such as Flickr.com, and also tagged with a common hashtag;
- blog posts outlining connections between talks after the event;
- the collation of resources using blogs and other media platforms;
- publishing the recorded talks;
- using a hashtag to collate all online content relating to the event.

Another powerful feature of the face-to-face events is the opportunity to network with like-minded teachers from your region and beyond. Social media tools have allowed professionals to not simply exchange business cards, but to also share a window into their professional lives. The ongoing sharing and activity on social media platforms allows teachers to stay in touch with, and continue to be inspired by, those they have met.

Face-to-face meetings such as TeachMeet are still hugely important for teachers. One of the things that sets TeachMeet apart from its more traditional counterparts is the way in which the integration of social media to amplify and prolong the impact of what is shared is part of the very fabric of the events.

1.4 Summary

At the beginning of this section, we asked how teachers and other educators are using social media to aid their own professional development, and what they think they and their students gain from this. The case studies reveal a large, and growing, body of education professionals who are using social media in a variety of ways to improve their teaching and learning. Some of the key benefits they have found include:

- keeping up-to-date with current debates in a way and at a time that suits them;
- drawing on ideas from around the world, challenging their own perspectives and inspiring new ways of thinking;
- connecting with others in similar positions in order to share plans and approaches, and for support and reassurance;
- encouraging them to reflect on their own practice, and to shape ideas through discussion of this practice;
- enabling stakeholders such as school and local authority leaders, parents and children to better understand what is happening in school.

Several contributors highlighted the way in which social media blur the boundaries between their personal and professional lives, and the possible effect of this on their work/life balance. That caveat aside, however, all the contributors to this section were hugely enthusiastic about social media and the effect they have had on their own development and their children's learning.

2 What evidence is there for the benefits of peer-to-peer CPD, and for using social media in this way?

There is, then, strong anecdotal evidence that participating in social media can benefit teachers' own development and, by extension, outcomes for their students. Does research evidence back this up?

We have found some interesting early research into this, plus a wealth of studies on the impact of peer-to-peer CPD more generally. The first section below examines the evidence for the benefits of teacher collaboration. The section outlines some of the factors that need to be in place for effective collaboration to take place. The third section looks at the benefits of extending collaboration across schools. The final section focuses more directly on the effect of social media. It examines a range of technology-based collaborations between teachers which centre on, or are linked to, social media, and reports on the findings of academic studies of these collaborations.

2.1 The case for collaboration

Evidence from systematic reviews of research into the impact of teachers' professional development on students¹³ provides strong evidence that teacher collaboration (in which professional conversations about experiments with new approaches prompt reflection and stimulate action) is a very effective element in developing new skills and knowledge. These show that CPD which is collaborative, sustained over time and supported by specialists results in improvements in:

13. Cordingley et al. (2003, 2005a, 2005b, 2007) and Timperley et al. (2007)

- teachers' attitudes and beliefs (e.g. becoming more thoughtful and self-critical¹⁴);
- teaching strategies used (e.g. moving from a 'stand and deliver' format based on information transfer to a more facilitative style¹⁵);
- students' attitudes and behaviour (e.g. increased student participation in class discussions, use of questions and volunteering explanations¹⁶); and
- students' achievement (one study reported that average class scores improved in a genetics topic from 32.6% before the CPD to 55% after the CPD, and in a forces topic from 53.5% to 73.3%¹⁷).

One of the reviews¹⁸ set out to compare the impact of collaborative CPD (where teachers received support from other teachers either within their own schools or from colleagues in other schools) with individually oriented CPD (which did not use collaboration as a learning strategy). There was strong evidence of the positive impact of collaborative CPD on teachers' practice, attitudes or beliefs, and evidence of improvements in students' learning, behaviour and attitudes. The studies of individually oriented CPD, by contrast, showed some evidence of changes in teachers' practices and beliefs, but only a modest impact on students' behaviours and attitudes, and no impact on learning outcomes.

There is clear evidence to suggest that teachers do not transfer the knowledge and skills they learn in training sessions to classroom practices without sustained peer coaching. One study¹⁹ found that learning theory, observing demonstrations and even practising skills in a training session resulted in, at best, a 5% transfer of skills and knowledge to the classroom. Peer coaching (whereby teachers supported each other when introducing new teaching strategies, analysing their effects, refining the strategies and consolidating progress together), on the other hand, resulted in a 95% transfer of skills and knowledge (see table below). Another study, echoing this message, concluded that 'it is [now] generally accepted that listening to inspiring speakers or attending one-off workshops rarely changes teacher practice sufficiently to impact on student outcomes'²⁰.

14. Farmer, J.D., Gerretson, H., & Lassak, M. (2003), 'What teachers take from professional development: cases and implications', pp. 331–60

15. Jacobsen, D.M. (2001), 'Building different bridges: technology integration, engaged student learning, and new approaches to professional development'

16. Parke, H.M., & Coble, C.R. (1997), 'Teachers designing curriculum as professional development: a model for transformational science teaching', pp. 773-789

17. Brown, D.F. (1992), *The Development of Strategic Classrooms in Two Secondary Schools*

18. Cordingley P, Bell M, Thomason S, Firth A (2005a), 'The impact of collaborative continuing professional development (CPD) on classroom teaching and learning: Review: How do collaborative and sustained CPD and sustained but not collaborative CPD affect teaching and learning?'

19. Joyce, B. R., & Showers, B. (2002), *Student achievement through staff development* (3rd ed)

20. Timperley et al. (2007), op cit

Teacher implementation of training in terms of percentage of participants

Type of activity	Outcomes		
	Knowledge	Skill	Transfer of training to classroom
Study of theory	10%	5%	0
Demonstration	30%	20%	0
Practice	60%	60%	5%
Peer coaching	95%	95%	95%

Table adapted from Joyce, B. R., & Showers, B. (2002). *Student achievement through staff development* (3rd ed). London: Longman (p.78)

2.2 The importance of effective contexts for CPD

Whilst collaboration is fundamental, it was not enough in itself. It is important that the collaboration is sustained over time, that it draws on external specialist expertise and that it is supported by school leaders²¹. Each of these elements is discussed briefly below.

Time

The reviews²² showed the importance of the CPD taking place over an extended period of time, but how time was used was as important as the amount of time available. Extended timeframes were necessary because the process of developing substantial new learning challenged existing beliefs, values and understandings. The learning process was iterative as new ideas were revisited and tested.

External specialist expertise

It was not enough to simply provide the opportunity and time for teachers to collaborate. Nearly all the studies included in all five reviews into this area involved the presence of external specialist expertise. One researcher commented that 'It is unlikely that any group of professionals would be able to manage the level of new learning without support and challenge from someone with expertise in the area.'²³

The presence of external experts, however, did not guarantee success. Experts needed more than knowledge of the content of changes in teaching practice that might make a difference to students. They also needed to know how to make the content meaningful to teachers and manageable within the context of teaching practice.

External experts who made a difference:

- made the evidence about effective processes available;
- made explicit links between professional and student learning;
- helped teachers collect and interpret evidence about the changes;

21. Cordingley et al. (2003, 2005a, 2005b) and Timperley et al. (2007), op cit

22. Cordingley et al. (2003, 2005a, 2005b) and Timperley et al. (2007), op cit

23. Timperley et al. 2007, op cit

- facilitated teachers' growing independence and autonomy;
- took account of teachers' starting points;
- encouraged experimentation;
- encouraged and helped to structure peer support; and
- helped teachers embed CPD in day to day practices²⁴.

Active school leadership

Effective leadership is important for school-based CPD²⁵. Studies show that effective leaders actively support the professional learning of their staff and, at times, participate themselves. They provide a supportive culture that enables teachers to learn new practices, feel safe about taking risks and have opportunities to learn from mistakes. Leaders ensure organisational arrangements are put in place that provide teachers with the opportunities to learn, access to relevant expertise and resources, and opportunities to meet to process new information.

One study²⁶ showed that, of all the activities that leaders undertake, promoting and participating in teachers' learning and development had the largest impact on student outcomes (twice as great as any other impact).

24. Cordingley et al. (2007), op cit, and Bell, M., Jopling, M., Cordingley, P., Firth, A., King, E., & Mitchell, H. (2006), What is the impact on pupils of networks that include at least three schools? What additional benefits are there for practitioners, organisation and the communities they serve?

25. Cordingley et al. (2007), op cit; Timperley et al. (2007), op cit; Bell et al. (2010), op cit

26. Robinson et al. (2009)

2.3 Support for professional learning across networks

Just as peer collaboration has benefits for individuals and groups of teachers within a school, collaboration between teachers across networks of schools has also shown to have important benefits.

Although the process of embedding professional learning works best when it takes place within the context of the school, support for professional learning need not necessarily take place there. One study²⁷ found strong evidence that networks of schools can be a highly effective vehicle for improving teaching, learning and attainment. Networks provide a means of harnessing the benefits of greater access to specialists and a wide range of perspectives to the work of enhancing teaching and learning, but they also make significant demands on resources, timescales and organisation. This helps to explain the very high incidence of networks focussed on goals with a strong moral purpose in the review of effective networks.

Examples of peer-to-peer collaborative activities include:

- sharing the learning experiences as a site team (teachers learning to teach other teachers), applying the experiences in the school and community, exploring the learning with others and repeating the shared training each year;
- participation in collaborative meetings and recording and analysing evidence about critical incidents in narrative accounts of significant classroom events;
- action research-based professional development involving a commitment to reciprocity and the creation of structures for sharing learning; and
- peer teams providing opportunities for sharing and mutual support through training, with further mentoring support coming from university staff.

This study showed, once again, that what was key to creating a positive impact on both teaching and learning across networks was CPD that:

- introduced something new that teachers could experiment with for themselves;
- made use of external expertise (for both initiating and sustaining effective networks and facilitating knowledge transfer);
- created self-sustaining capacity over time;
- promoted peer-to-peer collaboration (found to be the most prevalent vehicle for supporting the transfer of knowledge and practice);
- had specific foci (most of the networks were structured around a set of clearly defined set of aims; and created ownership of the network's goals and processes).

2.4 The potential of the use of social media for networked teacher collaboration

There are, to date, no systematic reviews focused on the use of social media for CPD - perhaps inevitable given the novelty of the practice. There are, however, a number of research projects in this area. Most of the studies outlined below did not go as far as exploring the impact of technology-mediated collaboration on student outcomes, but did show some interesting benefits to teachers which may flow through into student benefits.

27. Bell et al. (2006), op cit

Online forum

One study²⁸ described how two UK secondary and four UK primary schools joined together with similar schools in Malta to work collaboratively on school-based enquiries. The two communities worked together to develop research questions for the project and investigate key teaching and learning strategies. A forum-like area on a shared website enabled the teachers to discuss progress and exchange ideas. Results and outcomes were also shared electronically. Working with an international partner enabled teachers from both countries to learn from each other. One headteacher commented how 'the school-based enquiry provided a strong sense of ownership and a powerful strategy for improving areas of weakness in our school'. The teacher-researchers valued the opportunity to exchange ideas and practices with teachers from another country. Their observations, reflections and analyses of successful teaching and learning strategies in another country deepened their insights into their own teaching and correlated with marked shifts in their own teaching practice.

Online mentoring and support for NQTs

Another study²⁹ describes an online mentoring module provided by Edge Hill University to support NQTs during their induction year. The module was devised to provide opportunities for the NQTs to have contact with a tutor from the university as well as each other, and to also have access to resources during their first year of teaching. An online discussion board provided the opportunity for NQTs to raise issues or concerns which the tutors felt they may not have wanted to raise with their induction tutor, head of department or other colleagues in school for fear of seeming inadequate or being judged by their colleagues. At the same time, tutors posted weekly messages to try to encourage discussion and reflection.

Communication was less than the tutors expected. 20% of the 1,100 NQTs who attended the introductory sessions about the module responded regularly, and became involved in lengthy educational discussions with each other and the tutors, 72% regularly read the exchange of information between tutors and NQTs but didn't participate themselves, and 20% just accessed the resources. Reasons for not taking part ranged from feeling that their induction needs had been met by the school to feeling that the online mentoring put a further burden on their already high workload.

Online problem-based learning and discussion

A managed learning environment called Mtutor was used to teach an online Masters module for teachers at the University of Plymouth³⁰. Mtutor presented teachers with real life teaching problems, which they were required to solve online through collaboration with other teachers. It was anticipated that some teachers would recognise elements of their own professional practices represented in the scenarios, or may identify the attitudes or beliefs of their colleagues from a dialogue around the problem. The researchers felt that discussion of these issues would bring about a greater sense of self-awareness and a deeper examination of their own professional practices, leading to their professional identity being challenged.

28. Rogers & Theobald (2004), 'Creating a research culture in school'

29. Groves, J. (2006), 'Is there anybody out there? Online mentoring and support for Newly Qualified Teachers'

30. Wheeler et al. (2005)

The researchers interviewed a group of six teachers who had recently completed the online module to identify any changes in their professional practice styles. All six teachers reported a change in their professional practice as a result of the online module. While it was unclear whether the problem-solving or online element (or some other factor) influenced the changes in practice, there was evidence that the teachers found the problem-solving element to be deeply engaging and one that challenged their own professional practice styles. While the teachers were positive about the problem-solving approach, some criticised the nature of the online discussion, saying that it prohibited, rather than liberated, discussion. The researchers speculated that factors such as lack of familiarity or confidence of use, the permanency of the message archive (not being able to retract what they had written once posted) and the need to wait for responses contributed to this view.

Professional learning through blogging

A 2008 study³¹ examined how blogging supported the learning of fifteen practising science teachers in America. All the teachers were involved in a year-long graduate level course. The course met for three hours once a fortnight for a total of fourteen sessions. The teachers were required to maintain a professional blog as they engaged in educational reform. They were expected to construct and publish at least two posts between class sessions and to read and respond to each other's blogs. (Altogether, the fifteen teachers made 395 posts and 551 comments totalling 63,326 words). The study set out to code the types of interactions the teachers made and identified three overarching categories:

- Cognitive work identified whenever teachers displayed and discussed understandings of pedagogy, students or other issues related to teaching. Most instances of cognitive work occurred in blog posts (252 posts) rather than comments (8).
- Affective work (sharing emotions) mostly occurring in posts (222 posts; 54 comments).
- Social work represented mostly in comments (685 comments; 236 posts). These included mentoring – offering advice about particular aspects of professional work (22% of all comments), encouraging (29% of all comments) and commiserating (22% of all comments), and sharing resources (11% of all comments).

Almost all the teachers felt that blogging was a valuable asset to their professional learning. (The one teacher who disagreed had engaged the least). The kind of interactions the teachers valued included opportunities for receiving encouraging and thoughtful feedback from others, reflections on professional dilemmas and events, and contributions to other teachers' learning.

31. Luehmann, A.L. & Tinelli, L. (2008), 'Teacher professional identity development with social networking technologies: learning reform through blogging', pp.323-333

2.5 Summary

This section has described a number of initiatives aiming to promote teacher-to-teacher collaboration mediated by technology. Of these, the most successful (in terms of impact on both teaching and learning) appears to be the online forum linking schools in the UK and Malta. Based on evidence from the literature review of effective CPD more generally, it is likely that the international collaboration fostered in this case was effective because the teachers had a strong reason and structure for working together, and encouragement and support from their leaders to do so. The teachers had also benefited from external specialist input in terms of training in school-based research methods and knowledge of the evidence-based approach they were experimenting with.

The project involving blogging science teachers also appeared to achieve some success. Again, the teachers involved formed a community with a common goal – all were engaged in educational reform and had access to external expertise, as they were all involved in a year-long graduate course. In this case, the fact that contributing to the blogs regularly was a requirement of the course (and gaining accreditation) provided extra motivation for making the effort to use technology to communicate with each other.

Much less successful was the NQT online mentoring project. Although the HEI tutors made use of social media to provide opportunities for NQTs to contact them (as specialists) as well as each other during their induction year, few took up the opportunity, showing that simply having access to external expertise and a means of communicating with teachers in other schools is not enough by itself. Unlike the teachers in the UK/Malta study, these teachers were not involved in a mutual, sustained enquiry or experimentation that was also supported in their own schools.

The Mtutor project at the University of Plymouth was more successful in terms of the amount of correspondence that took place between teachers. In this case, access to specialist training / subject knowledge was included as part of the computer-based network system but, as was also the case in the NQT project, the teachers appeared to work as individuals within their schools, relying entirely on the support of other teachers using the system. They did not appear to be involved in sustained enquiry, which will have limited the impact of the technology-mediated professional development on both their teaching and their students' learning.

In conclusion, then, the research on effective CPD, networks and use of social media suggests that, when using technology for mediating communication between teachers for professional development purposes:

- like-minded participants should be invited to take part and form a learning community within which everyone is committed to trying out new things and taking risks;
- the community should serve a clear, shared purpose that fulfils a need or requirement, such as collaborative enquiry focused on a specific aspect of practice;
- leaders should be brought on board, so that they welcome the initiative and actively help to encourage the professional learning community that is being created;

- participants should have access to external, specialist support whose expertise and detachment from the schools makes them well placed to introduce new perspectives and challenge prevailing norms; and
- some face-to-face meetings should ideally take place, such as conferences and workshops, that enable teachers to consolidate their professional relationships, and experts to introduce teachers to research literature and enquiry methods and model, observe and give feedback on practice.

3. What can teaching learn from how business uses social media to drive improvement?

Harnessing the power of social media for professional learning is not unique to the teaching profession. A recent survey of learning and training leaders at 125 businesses across the US³² illustrated the extent to which social media have pervaded the workplace and are widely accepted as a professional networking and development tool. The survey found that:

- **82%** of respondents use social media to advance their own professional skills and resources;
- **81%** believe that social media offer valuable learning opportunities for their employees;
- **98%** agree that social media are changing how employees are learning and accessing information.

Jane Hart, founder of the Centre for Learning and Performance Technologies, sees social media being used to engage professional learners in both formal and informal learning, and is increasingly witnessing social media tools being used 'in the workplace by individuals and teams to solve business and performance problems'³³.

So what can teaching learn from business in this respect? This section describes initiatives taking place in two UK-based organisations, with interesting resonances for the teaching profession.

32. *How Informal Learning is Transforming the Workplace*, CARA, 2010

33. 'Amplifying opportunity' in *e-learning age*, May 2011, pp.8-9

Case study 1: Poppyscotland using social media to better understand a charity's supporters

Founded in 1923 as The Earl Haig Fund Scotland, Poppyscotland, as it is now known, is a registered charity supporting ex-servicemen and women and their families in Scotland.

Poppyscotland recently merged with their sister charity The Royal British Legion, which operates in England, Wales and Northern Ireland, now forming the largest charitable group supporting the armed forces community across the UK. Using public donations, Poppyscotland provides financial aid and specialist services. It also carries out independent research into the needs of the ex-service community.

Since 2010, social media has played an important role in the way that the Poppyscotland team provide information and support about their charitable work and drive donation efforts. They currently use a Facebook, YouTube and Twitter account providing those in the community with a range of ways to connect and interact with the support provided by the team. They originally harnessed social media to aid in their marketing and communications, but have consequently found it a robust way to learn about their community of volunteers and supporters.

Social media starts as a communications tool, and ends up being a way to engage the community

Fraser Bedwell, head of marketing, thinks many people still see social media as a distinct function and tool in itself, as opposed to an approach to communication. The more he has used it, both personally and in his work with Poppyscotland, the more he has grown to realise it is not a bolt-on: 'It is not simply a marketing and communications activity. Social media is a style of communication that is about engaging with a community in an open and transparent way. It is more of a cultural shift in the organisation as opposed to a marketing strategy.'

According to Fraser, the more traditional approach in the charity has given way in the last three to five years to embracing digital platforms, and Poppyscotland has become far more active in its online and social message: 'The major difference with how we used to work is that social media provides the opportunity to communicate very quickly and cost effectively all year round.' For Fraser, this was an important element early on: 'The initial appeal of social media for us was that it would help engage the community throughout the course of the year. Because, although we have enviable levels of exposure and brand awareness for two weeks of the year, it is an ongoing challenge to keep the community engaged during other times. Everybody wants to show their support for it in a very visible way during the poppy appeal, and social media allows us to engage with those people when the interest is at its highest and subsequently keep that engagement going.'

Learning by listening

To monitor the engagement with Poppyscotland across a range of social media platforms, Fraser has set up a Postling account. This service sends an email if Poppyscotland is mentioned on platforms such as blogs and Facebook. This notification is sent to a range of staff in the charity, raising the team's awareness of the activity and also increasing the chance of a focused response.

Often, social platforms such as Facebook and Twitter simply become information channels, and there is a danger a corporate message takes over. Fraser is very cognisant of this, and is keen to engage with the Poppyscotland community in debate and discussion around some of the issues they face.

Looking to the year ahead, Fraser thinks that the challenge is to see tangible returns on the engagement in social platforms – not just 'likes' on a post, but people volunteering to help, attending events and ultimately donating to the charity.

Case study 2: URENCO

using social media to embed organisational learning

URENCO is an independent international energy and technology company with plants in Germany, Netherlands, the UK and the United States. Its principal activity is the provision of a service to enrich uranium to provide fuel for nuclear power utilities. Social media is key to its company-wide approach to learning and development.

Craig Taylor has been a Learning Technologist at URENCO UK Ltd for the last four years. He advises on the use of current and emerging learning technologies to enhance both formal and informal learning activities, and acts as a social media correspondent for Nuclear TV.

Having worked in training and development since 1993, Craig's key realisation was that Twitter could be used for learning at URENCO, and not simply to hear about what celebrities are having in their sandwiches. He believes that, since beginning to use social media, 'I have learned more about my professional field in the last eighteen months than in the eighteen years beforehand'.

Craig felt compelled to help spread what he had learned and organised an 'unconference' within the company to share the journey he had begun. He helped colleagues establish their own Twitter accounts, and shared with them the successes he had achieved and the gains he had made regarding his own learning.

'There are doctors and physicists who have been able to make connections with others on Twitter, in similar areas of expertise, and now they are networking – and of course what they are doing is learning,' says Craig. 'Now there is this core of people who have picked it up, and twelve months later they have actually built their own networks and are benefiting from it. I am really pleased and proud that I was able to introduce those people to those benefits.'

Tapping into expertise elsewhere

Craig is quick to point out, however, that these individuals are in the minority, and that on the whole the traditional nuclear industry is guilty of ring fencing itself off from other communities, and has a poor track record of sharing: 'We cocoon ourselves inside our perimeter fence and inside our firewall and treat ourselves as something special.' This is, according to Craig, to the disadvantage of the workforce, as they are not able to tap into the expertise he has access to in his online network.

This disconnect is compounded by the blocking of social media sites on company premises, which draws parallels with the experience in many schools. Craig feels that it is vital to provide some form of resource so employees can learn more about these tools.

He also voices concerns about the disconnect between what children are experiencing in schools and what is taking place in his industry: 'I feel there is going to be this disconnect, if it is not already here, not only in what they have had access to from a hardware and software point of view, but in how youngsters have learned to learn. When it comes to businesses there is a very good chance they are simply not going to get the physical resources themselves, nor the opportunities to use online networks to support their learning. Those opportunities are just not there in these sorts of organisations.'

3.2 Summary

Social media, then, are starting to fundamentally alter all walks of life. The organisations profiled in this section are beginning to use social media in ways which are equally relevant to the teaching profession. They use social media tools to:

- encourage debate and discussion around issues that matter to the organisation;
- enhance professional development through the sharing of ideas and best practice;
- communicate quickly and effectively with customers, potential donors and other stakeholders to increase their level of engagement with the organisation;
- monitor what the wider community is saying about them and their products and services;
- build their own brand, at both corporate and individual levels.

The teaching community should certainly look at how businesses and other organisations are using social media, and consider how their approaches might translate into schools. However, as one of the contributors to this section points out, most companies are still feeling their way in this area, and could equally learn from some of the innovative practices being developed by teachers and school leaders.

Conclusions and recommendations: What could school leaders and policymakers do to further exploit the potential of social media to help teachers develop in a cost-effective way?

The 750 million users of Facebook generate one million photos, wall posts, status updates and other postings, every minute of every day. YouTube publishes more than 48 hours of video every minute. One thing we can be sure of is that, in learning as in commerce, travel, personal communication and shopping, social media will continue to be a pervasive force. The subsequent collision with more traditional notions of learning and professional practice in education is inevitable.

Teachers increasingly want to contribute their expertise just as much as they want to hear that of others. There is a growing frustration at 'chalk and talk', transmission-based teacher-learning experiences that do not actively involve participants. But the ethics of what it means to be a 'professional' teacher are becoming complex. Just because someone can share, does it mean that their professional contribution is worth sharing? Most teacher standards of professionalism include at some point a reference to personal development and reflection, a reference which, until recently could be accounted for by attendance at a couple of first aid and child protection courses every year.

Now, though, as more school leaders and policymakers see the potential for vastly improving thinking and practice in the classroom through a more public and continuous reflection on progress, will we see questions of professionalism being raised about those who choose not to share their professional development openly? And what can be done to make the technologies we use both to share our thinking and to see the thinking of others more intuitive, easier to access and less technologically daunting?

The choice of tools to help a teacher to become a better educator and prolong their professional development today is very different from those available five years ago. There are greater opportunities to use international networks and existing online social networking skills to extend teachers' professional development. If senior leaders do not facilitate this, if a culture of support is not forthcoming, these opportunities are often lost.

In the UK, the scale of platforms such as Facebook, Twitter and Google's suite of social tools (including YouTube), and the burgeoning development of the social media ecosystem around those, cannot be ignored. Policy makers and school leaders need to engage with the impact of these tools in education, and to consider what they need to do in order to harness them to drive improvements in teaching and learning.

Based on the evidence and case studies presented in this report, we offer five key recommendations for school leaders, and a further five key recommendations for policymakers, on how they might harness the benefits of social media for teacher professional development. Each recommendation is followed by a number of specific suggestions that can help to achieve the broader objective.

Key recommendations for school leaders

1. Learn about and engage with the social platforms that your teachers, parents and pupils are using every day.

- School leaders have a professional responsibility to understand the social landscape used by pupils, and it's difficult, if not impossible, to do this unless you are actively involved, first hand, in sharing news, hearing from parents and students on the likes of Facebook and Twitter.
- Speak to staff to establish what they are using for professional learning – invite them to help you learn about the tools.
- Create opportunities for students, staff and even parents to learn together about the changing nature of privacy, publishing and sharing on sites such as Facebook: there is a learning opportunity for everyone in the school community here.
- Create a positive set of social media guidelines, encouraging staff to share their professional learning and setting out simple advice on what the school's expectations of this are in terms of tone, language and quality³⁴.

2. Use a social media tool as part of your communications with the school community.

- Don't rely on a school website as your communication tool – it's a destination that people have to choose to visit. The average person in Britain visits around six destination sites a day: perhaps YouTube, the BBC, Google, Facebook and a gaming site. Few visit school websites every day. Instead, use social media as the first place information gets published and add a 'widget' or a feed, which can automatically push this content out to other sites, to replicate it on other social media sites as well as your school website.

34. East Lothian Council's edubuzz.org created an open source set of guidelines which have helped its 15,000 students and 1,500 staff to share without any glitches this past six years (<http://edubuzz.pbworks.com/w/page/11239901/socialmediastaff>).

- Ask your parents about how they use social media and establish how they access different tools. Would a Facebook page or a blog be useful?
- Actively use the tools you have made a start with, refer to them in traditional face-to-face meetings and paper correspondence, encourage staff and parents to engage with your school's social spaces³⁵.
- Do little, but often. Parents have a natural curiosity about what happens in school, but may only see the artwork in your corridors once or twice a year. Where student work is visual (art, photography, sculpture, craft, design) or auditive (music, reading one's written work out loud, foreign language work) use the simple features on any smartphone or feature phone to capture this and post it online immediately. Having one's teacher or, even more so, one's head teacher, validating an achievement by publishing it to the school's Facebook site, accessible by the student and their parents that evening, is a powerful reward.
- Harness the visual: shooting a quick video newsletter on a smartphone and uploading it to YouTube takes about four minutes, where writing one might take forty.

3. Validate and support your staff in using social media tools for ongoing professional development.

- Provide the space and time in schools to continue and maintain this type of learning and sharing of practice. Create performance management or professional development targets associated with learning online.
- Encourage the use of social media, but encourage healthy digital habits too, by eking out small chunks of the week where teachers can put time aside to develop, prune and reach out to their professional learning network.
- Validate the use of social media as a means for professional learning in school by referring to its practice in a positive, supportive way in staff meetings, INSET days and internal communication.
- Provide age-appropriate opportunities for pupils to learn about social media platforms. Extend this to staff training and offer support to parents as part of wider online awareness information. Where possible, create positive contexts around how the tools are used (e.g. how to create a learning network using Twitter, or using a blog as a portfolio for future work).

4. Turn online activity into offline actions, in order to harness the benefits of face-to-face interaction alongside those of online interaction

- Consider using digital media to make offline events occur, like the people behind the Edinburgh Coffee Morning. Online discussion amplified by a face-to-face event helps keep connections feel close and vibrant, and makes a connection between the learning taking place in the school walls and the informal learning opportunities taking place outside
- Host a TeachMeet 'unconference' in your school, but invite teachers from all around, whether or not they're in your local area. It's an event that requires little organisation, and little lead time to generate interest and gather teachers to speak. Consider making TeachMeets part of your school's annual CPD calendar.

35. One school in south west England went as far as changing its name to remind the community of the learning taking place on its site: saltash.net Community School.

5. Implement robust systems for evaluating the impact of CPD on teacher effectiveness and student outcomes.

- Encourage teachers to evaluate the effectiveness of any form of CPD they undertake, whether online or face-to-face.. Has it enabled them to reflect on their own practice? Did it result in them making changes to the way in which they approach their own teaching? Can they see a measurable change in student outcomes as a result?
- Use this feedback to adjust your school's approach to CPD, focusing teachers' precious time on learning opportunities that most positively affect teaching practice and student outcomes.

Key recommendations for policymakers

1. Publish guidelines and support for teachers and leaders to help them use social media in schools.

- Invite teachers and school leaders to author the support materials. In East Lothian Council, for example, the social media guidelines were co-designed on a wiki, a webpage anyone can edit, over a period of two weeks. This creates understanding and ownership.
- Support and resources should be in place to help new and existing teachers access social media appropriately and to fully understand the issues involved, such as the effect on work/life balance.
- Not all school leaders see the point of sharing publicly, or fear that they do not have time to interact with the school community in this way. Policymakers should show the quantitative benefits of using social media as a more efficient way of communicating with the school community than traditional mechanisms, even more so than a school website since information is seen by people in the online locations they already choose to spend their time in.

2. Consider how you will begin to unfilter social media sites for use in schools

- Much of the richest content and connections on the web are currently blocked or filtered in British schools. The time has come to open these up for legitimate use for teacher learning.
- Look to those local authorities who have already made the move, and ask them for advice. Many authorities have described in some detail the shift from filtering to opening up access.
- Have a trial period where a small group of useful sites like Twitter and Facebook are unfiltered, for teacher use, and then consult with teachers as to how that period went.
- Make sure that your social media guidelines are understood by students, parents and teachers before you make this move, to increase its chances of success.

3. Recognise and celebrate self-directed professional learning by teachers using online tools, and the role of social media in this learning.

- Instigate an accreditation system for teachers spending time reflecting in a public way, and for ongoing research done through social media. Incentivise those teachers participating in ongoing professional development online.

4. Create a common online space where the whole education community can find each other.

- Find a 'brand', a website address that everyone can remember easily and create a 'wall' of latest activity that shows students, parents and teachers the vibrant and regular sharing of learning that happens in your area.
- Encourage schools to make this location the homepage of their in-school computers.
- Highlight particularly interesting examples of practice-sharing on your homepage, to stimulate other good practice.

5. Ensure that all Initial Teacher Training courses demonstrate a strong focus on the use of social media tools for ongoing professional development.

- There is ample and growing evidence that professional development experiences online, over time and with an exposure to a wide range of viewpoints and expertise, offer teachers a richer professional development experience than traditional CPD touchpoints alone. Universities and colleges, as well as schools, should be using these tools to engage with their students and so validate their use.
- Trainee teachers should learn from as many practicing teachers as possible, not just those they meet on placement, so an ongoing development of a wider professional development network online could be integrated as a core requirement of a teacher training programme. By developing their own professional networks, they create source of inspiration and assistance through their course and beyond.
- Increasingly, those recruiting teachers in a competitive market see a positive digital footprint as a major calling card of teacher quality. It's easier to peer into the dedication, reflection and thinking that goes into a teacher's work when it's shared little by little over time, than when it's presented in a few paper-based reports or projects placed on a university's closed and private virtual learning environment.

Conclusion

The people and organisations profiled in this report have all found that using social media has brought rich rewards. Through blogging, tweeting and participating in online forums they have been able to access the thoughts and ideas of education professionals across the world. They have been able to reflect on their own practice, and to use that reflection to shape their teaching. They have found new ways to engage with their pupils, parents and the wider community, and to use the insights they have gained to improve the learning in their school.

Social media will not provide a silver bullet. Engaging with colleagues in this way can be frustrating, time-consuming and demanding. Challenging yourself, or being challenged by others, on the way you approach teaching and learning is not for the faint-hearted. But if school leaders and policymakers are serious about raising teaching standards, the potential of social media to engage, support and inspire teachers should not be ignored.

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